20) IMPROVIDING AND INSTALLING LED STREET LIGHTS WITH TIMER AND FITTINGS IN WARD NO. 09 (VIDYARANYAPURA), VIDYARANYAPURA SUB DIVISION

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BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 03

(PACKAGE CONSISTS OF 21 WORKS IN WARD NO 08 AND WARD NO 09)

NAME OF WORK : PROVIDING AND INSTALLING LED STREET LIGHTS WITH TIMER AND FITTINGS IN WARD NO. 09 VIDYARANYAPURA SUB DIVISION

Sl.No.	Description of work	Qty	Rate	Unit	Amount
1	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with ..... W System Power consumption. LED Efficiency>130lm/w at 1W & FixtureEfficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved /	88.00	18720.00	Each	**1647360.00**
2	Supplying and Fixing of..... mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires. Using 32mm dia G.I.pipe (Pg No. 108, Item No. 17.12)	135.00	893.00	Each	**120555.00**
3	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded Aluminium unsheathed wire single core/multi core cable in open or consealed system of wiring. a)4 sqmm. (Pg No. 12, Item No. 2.12.1)	440.00	7.50	Each	**3300.00**
4	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of ROUP-A.3.5 core 25sqmm (Pg No. 5, Item No. 7.4.5)	150.00	165.60	Per Mtr	**24840.00**
5	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct.25 sqmm to 75 sqmm (Pg No. 61, Item No. 7.8.7)	150.00	34.80	Per Mtr	**5220.00**

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6	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and Communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components. **Approved Rate**	22.00	51500.00	Each	**1133000.00**
7	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes25 sqmm Long Barrel (Pg No. 64, Item No. 7.21.7)	55.00	20.59	Each	**1132.45**
				Sub Total	**2935407.45**
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)				60000
	Miscellenious and rounding				4593
	TOTAL AMOUNT				**3000000**
	RUPEES THIRTY LAKHS ONLY				

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017, KPWD (Ele) S.R.2014-15 & Approved Rates.

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

Executive Engineer
Byatarayanapura Division
Yalahanka Zone, B.B.M.P.
Bangalore-560092

Technical Sanction
Accepted for Rs 30.00 lacks only
Head of Office P3158
CER NO: 52 Dt: 29/01/18

JA — CE (YNK)

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21) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT KRISHNA TEMPLE AREA, DESHABANDUNAGARA, CHIKKAVENKATAPPA LAYOUT AND SURROUNDING AREAS IN WARD NO. 09 (VIDYARANYAPURA), VIDYARANYAPURA SUB DIVISION

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BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 03

(PACKAGE CONSISTS OF 21 WORKS IN WARD NO 08 AND WARD NO 09)

NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT KRISHNA TEMPLE AREA, DESHABANDUNAGARA, CHIKKAVENKATAPPA LAYOUT AND SURROUNDING AREAS IN WARD NO. 09 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	New Drain								
	RAMASWAMAPPA LAYOUT								
	2nd Cross	Cum	1	22.00	0.60	0.60	7.92		
	Desilting drain								
	DESHBANDHU NAGAR								
	Shiva temple Road	Cum	1	29.90	0.70	0.40	8.37		
	2nd Cross	Cum	1	56.20	0.70	0.40	15.74		
	7th Main	Cum	2	215.90	0.70	0.40	120.90		
	CHIKKA VENKATAPPA LAYOUT								
	1st Cross Road	Cum	2	100.30	0.70	0.40	56.17		
	2nd Cross Road	Cum	2	99.00	0.65	0.40	51.48		
	3rd Cross Road	Cum	2	81.50	0.60	0.40	39.12		
	Chikka venkatappa	Cum	1	123.60	0.60	0.40	29.66		
	Main Road	Cum	1	114.50	0.70	0.40	32.06		
	RAMASWAMAPPA LAYOUT								
	2nd Cross	Cum	2	37.40	0.70	0.40	20.94		
	1st Main Road kattaramma temple junction	Cum	2	88.00	0.70	0.40	49.28		
	3rd Cross Road	Cum	1	39.38	0.70	0.40	11.03		
	TELECOM LAYOUT								
	3rd cross road	Cum	2	150.60	0.60	0.40	72.29		
	2nd cross road	Cum	2	153.30	0.65	0.40	79.72		
	1st cross road	Cum	2	150.80	0.60	0.40	72.38		
	5th cross (DV Gundappa road)	Cum	2	150.10	0.60	0.40	72.05		
	SIR M.V LAYOUT								
	2nd main 6'A cross road	Cum	2	111.65	0.60	0.40	53.59		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**792.70**	**166.42**	**131921.53**
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8(M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 (P.No.12/I.No. 4.3)								
	New Drain								
	RAMASWAMAPPA LAYOUT								
	2nd Cross	Cum	1	22.00	0.60		13.20		

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	Basic rate								4867.00	
	Area weightage 6%								292.02	
	Total							13.20	5159.02	68099.66
3	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing etc., complete.(P.No.25,I.No.5.31.2)									
	New Drain									
	RAMASWAMAPPA LAYOUT									
	2nd Cross									
	At Bottom	Sqm	1	22.00	0.60		13.20			
	At Sides	Sqm	2	22.00	0.60		26.40			
	Sub Total						**39.60**			
	Open Drain (Sides & Bottom)	Width=Perimeter of Drain in U Shape								
	DESHBANDHU NAGAR									
	7th Main	Sqm	2	215.90	1.80		777.24			
	CHIKKA VENKATAPPA LAYOUT									
	1st Cross Road	Sqm	2	100.30	1.80		361.08			
	2nd Cross Road	Sqm	2	99.00	1.80		356.40			
	3rd Cross Road	Sqm	2	81.50	1.80		293.40			
	Chikka venkatappa	Sqm	1	123.60	1.80		222.48			
	Main Road	Sqm	1	114.50	1.80		206.10			
	TELECOM LAYOUT									
	3rd cross road	Sqm	2	150.60	1.80		542.16			
	2nd cross road	Sqm	2	153.30	1.80		551.88			
	1st cross road	Sqm	2	150.80	1.80		542.88			
	5th cross (DV Gundappa road)	Sqm	2	150.10	1.80		540.36			
	SIR M.V LAYOUT									
	2nd main 6'A cross road	Sqm	2	111.65	1.80		401.94			
	Sub Total						**4795.92**			
	Consider 5% Qnty for Refixing						**239.80**			
	Basic rate								779.00	
	Area weightage 6%								46.74	
	Total						**279.40**		**825.74**	**230708.45**
4	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)									
	Closed Drain									
	Cover Slab									
	DESHBANDHU NAGAR									
	Shiva temple Road	Sqm	1	29.90	0.70		20.93			
	2nd Cross	Sqm	1	56.20	0.70		39.34			
	RAMASWAMAPPA LAYOUT									
	2nd Cross	Sqm	2	37.40	0.70		52.36			
	1st Main Road kattaramma temple junction	Sqm	2	88.00	0.70		123.20			
	3rd Cross Road	Sqm	1	39.38	0.70		27.57			
	Open Drain (Sides & Bottom)									
	DESHBANDHU NAGAR									
	7th Main	Sqm	2	215.90	1.80		777.24			

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	CHIKKA VENKATAPPA LAYOUT								
	1st Cross Road	Sqm	2	100.30	1.80		361.08		
	2nd Cross Road	Sqm	2	99.00	1.80		356.40		
	3rd Cross Road	Sqm	2	81.50	1.80		293.40		
	Chikka venkatappa	Sqm	1	123.60	1.80		222.48		
	Main Road	Sqm	1	114.50	1.80		206.10		
	RAMASWAMAPP A LAYOUT								
	New Drain At 2nd Cross	Sqm	1	22.00	1.80		39.60		
	TELECOM LAYOUT								
	3rd cross road	Sqm	2	150.60	1.80		542.16		
	2nd cross road	Sqm	2	153.30	1.80		551.88		
	1st cross road	Sqm	2	150.80	1.80		542.88		
	5th cross (DV Gundappa road)	Sqm	2	150.10	1.80		540.36		
	SIR M.V LAYOUT								
	2nd main 6'A cross road	Sqm	2	111.65	1.80		401.94		
	Sub Total						**5098.92**		
	Consider 5% Qnty for Removing						**254.95**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**254.95**	**65.72**	**16755.04**
5	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Closed Drain								
	Cover Slab								
	DESHBANDHU NAGAR								
	Shiva temple Road	Sqm	1	29.90	0.70		20.93		
	2nd Cross	Sqm	1	56.20	0.70		39.34		
	RAMASWAMAPP A LAYOUT								
	2nd Cross	Sqm	2	37.40	0.70		52.36		
	1st Main Road kattaramma temple junction	Sqm	2	88.00	0.70		123.20		
	3rd Cross Road	Sqm	1	39.38	0.70		27.57		
	Sub Total						**263.40**		
	Consider 30% Qnty for Removing & Refixing						**79.02**		
	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**79.02**	**80.56**	**6365.75**
6	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	DESHBANDHU NAGAR								
	Shiva temple Road	Sqm	1	29.90	0.70		20.93		
	2nd Cross	Sqm	1	56.20	0.70		39.34		
	RAMASWAMAPP A LAYOUT								
	2nd Cross	Sqm	2	37.40	0.70		52.36		

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	1st Main Road kattaramma temple junction	Sqm	2	88.00	0.70		123.20		
	3rd Cross Road	Sqm	1	39.38	0.70		27.57		
	Sub Total						**263.40**		
	Consider 5% Qnty for Refixing						**13.17**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**13.17**	**665.68**	**8766.87**
7	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								
	Road cutting portions								
	DESHBANDHU NAGAR								
	Shiva temple Road	Cum	1	29.90	5.20	0.23	35.76		
	2nd Cross	Cum	1	56.20	5.70	0.23	73.68		
	CHIKKA VENKATAPPA LAYOUT								
	1st Cross Road	Cum	1	1.21	5.10	0.23	1.42		
	2nd Cross Road	Cum	1	5.61	0.50	0.23	0.65		
	Chikka venkatappa Main Road	Cum	2	4.62	0.60	0.23	1.28		
	RAMASWAMAPPA LAYOUT								
	1st Main Road kattaramma temple junction	Cum	2	140.20	1.70	0.23	109.64		
		Cum	5	3.85	1.00	0.23	4.43		
	3rd Cross Road	Cum	1	4.40	0.60	0.23	0.61		
	TELECOM LAYOUT								
	3rd cross road	Cum	2	5.28	0.70	0.23	1.70		
	2nd cross road	Cum	1	5.28	0.60	0.23	0.73		
	5th cross (DV Gundappa road)	Cum	1	5.28	0.60	0.23	0.73		
	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						**230.61**	**86.92**	**20044.34**
8	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.7	Cum					1023.31		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.00 Tonne/Km.) For 15 Kms = (2.50 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00					116.00	
	Basic rate							6.96	
	Area weightage 6%								

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	Total						1023.31	122.96	125826.09
9	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								
	Road cutting portions								
	DESHBANDHU NAGAR								
	Shiva temple Road	Cum	1	29.90	5.20	0.23	35.76		
	2nd Cross	Cum	1	56.20	5.70	0.23	73.68		
	CHIKKA VENKATAPPA LAYOUT								
	1st Cross Road	Cum	1	1.21	5.10	0.23	1.42		
	2nd Cross Road	Cum	1	5.61	0.50	0.23	0.65		
	Chikka venkatappa Main Road	Cum	2	4.62	0.60	0.23	1.28		
	RAMASWAMAPPA LAYOUT								
	1st Main Road	Cum	2	140.20	1.70	0.23	109.64		
	kattaramma temple junction	Cum	5	3.85	1.00	0.23	4.43		
	3rd Cross Road	Cum	1	4.40	0.60	0.23	0.61		
	TELECOM LAYOUT								
	3rd cross road	Cum	2	5.28	0.70	0.23	1.70		
	2nd cross road	Cum	1	5.28	0.60	0.23	0.73		
	5th cross (DV Gundappa road)	Cum	1	5.28	0.60	0.23	0.73		
	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						**230.61**	**1768.08**	**407731.16**
10	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	Road cutting portions								
	DESHBANDHU NAGAR								
	Shiva temple Road	Sqm	1	29.90	5.20		155.48		
	2nd Cross	Sqm	1	56.20	5.70		320.34		
	CHIKKA VENKATAPPA LAYOUT								
	1st Cross Road	Sqm	1	1.21	5.10		6.17		
	2nd Cross Road	Sqm	1	5.61	0.50		2.81		
	Chikka venkatappa Main Road	Sqm	2	4.62	0.60		5.54		
	RAMASWAMAPPA LAYOUT								
	1st Main Road	Cum	2	140.20	1.70		476.68		
	kattaramma temple junction	Cum	5	3.85	1.00		19.25		
	3rd Cross Road	Cum	1	4.40	0.60		2.64		
	TELECOM LAYOUT								
	3rd cross road	Sqm	2	5.28	0.70		7.39		
	2nd cross road	Sqm	1	5.28	0.60		3.17		

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	5th cross (DV Gundappa road)	Sqm	1	5.28	0.60		3.17		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						1002.64	13.78	13816.35
11	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502. (P.No.161, I.No.21.6)								
	Considered same Above Qty	Sqm					1002.64		
	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						1002.64	27.56	27632.70
12	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								
	DESHBANDHU NAGAR								
	Shiva temple Road	Cum	1	29.90	5.20	0.05	7.77		
	2nd Cross	Cum	1	56.20	5.70	0.05	16.02		
	CHIKKA VENKATAPPA LAYOUT								
	1st Cross Road	Cum	1	1.21	5.10	0.05	0.31		
	2nd Cross Road	Cum	1	5.61	0.50	0.05	0.14		
	Chikka venkatappa Main Road	Cum	2	4.62	0.60	0.05	0.28		
	RAMASWAMAPPA LAYOUT								
	1st Main Road	Cum	2	140.20	1.70	0.05	23.83		
	kattaramma temple junction	Cum	5	3.85	1.00	0.05	0.96		
	3rd Cross Road	Cum	1	4.40	0.60	0.05	0.13		
	TELECOM LAYOUT								
	3rd cross road	Cum	2	5.28	0.70	0.05	0.37		
	2nd cross road	Cum	1	5.28	0.60	0.05	0.16		
	5th cross (DV Gundappa road)	Cum	1	5.28	0.60	0.05	0.16		
	Sub Total						**50.13**		
	Consider 5% qty for Profile correction and Dipression filling						**2.51**		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**52.64**	**7120.02**	**374787.14**
13	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	DESHBANDHU NAGAR								
	Shiva temple Road	Sqm	1	29.90	5.20		155.48		
	2nd Cross	Sqm	1	56.20	5.70		320.34		
	7th Main	Sqm	1	215.90	5.30		1144.27		

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CHIKKA VENKATAPPA LAYOUT								
1st Cross Road	Sqm	1	100.30	5.00		501.50		
2nd Cross Road	Sqm	1	99.00	5.10		504.90		
3rd Cross Road	Sqm	1	81.50	4.80		391.20		
Chikka venkatappa	Sqm	1	123.60	4.10		506.76		
Main Road	Sqm	1	114.50	4.50		515.25		
RAMASWAMAPPA LAYOUT								
2nd Cross	Sqm	1	53.80	3.50		188.30		
1st Main Road kattaramma temple junction	Sqm	1	140.20	3.50		490.70		
3rd Cross Road	Sqm	1	46.30	3.80		175.94		
TELECOM LAYOUT								
3rd cross road	Sqm	1	150.60	4.80		722.88		
2nd cross road	Sqm	1	153.30	4.90		751.17		
1st cross road	Sqm	1	150.80	5.00		754.00		
5th cross (DV Gundappa road)	Sqm	1	150.10	5.00		750.50		
SIR M.V LAYOUT								
2nd main 6'A cross road	Sqm	1	111.65	4.10		457.77		
Basic rate							3.00	
Area weightage 6%							0.18	
Total						**8330.96**	**3.18**	**26492.44**

14 KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7) .

For Road surface								
DESHBANDHU NAGAR								
Shiva temple Road	Sqm	1	29.90	5.20		155.48		
2nd Cross	Sqm	1	56.20	5.70		320.34		
7th Main	Sqm	1	215.90	5.30		1144.27		
CHIKKA VENKATAPPA LAYOUT								
1st Cross Road	Sqm	1	100.30	5.00		501.50		
2nd Cross Road	Sqm	1	99.00	5.10		504.90		
3rd Cross Road	Sqm	1	81.50	4.80		391.20		
Chikka venkatappa	Sqm	1	123.60	4.10		506.76		
Main Road	Sqm	1	114.50	4.50		515.25		
RAMASWAMAPPA LAYOUT								
2nd Cross	Sqm	1	53.80	3.50		188.30		
1st Main Road kattaramma temple junction	Sqm	1	140.20	3.50		490.70		
3rd Cross Road	Sqm	1	46.30	3.80		175.94		
TELECOM LAYOUT								
3rd cross road	Sqm	1	150.60	4.80		722.88		
2nd cross road	Sqm	1	153.30	4.90		751.17		
1st cross road	Sqm	1	150.80	5.00		754.00		
5th cross (DV Gundappa road)	Sqm	1	150.10	5.00		750.50		

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	SIR M.V LAYOUT								
	2nd main 6'A cross road	Sqm	1	111.65	4.10		457.77		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**8330.96**	**12.72**	**105969.75**
15	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	DESHBANDHU NAGAR								
	Shiva temple Road	Cum	1	29.90	5.20	0.04	6.22		
	2nd Cross	Cum	1	56.20	5.70	0.04	12.81		
	7th Main	Cum	1	215.90	5.30	0.04	45.77		
	CHIKKA VENKATAPPA LAYOUT								
	1st Cross Road	Cum	1	100.30	5.00	0.04	20.06		
	2nd Cross Road	Cum	1	99.00	5.10	0.04	20.20		
	3rd Cross Road	Cum	1	81.50	4.80	0.04	15.65		
	Chikka venkatappa Main Road	Cum	1	123.60	4.10	0.04	20.27		
		Cum	1	114.50	4.50	0.04	20.61		
	RAMASWAMAPPA LAYOUT								
	2nd Cross	Cum	1	53.80	3.50	0.04	7.53		
	1st Main Road kattaramma temple junction	Cum	1	140.20	3.50	0.04	19.63		
	3rd Cross Road	Cum	1	46.30	3.80	0.04	7.04		
	TELECOM LAYOUT								
	3rd cross road	Cum	1	150.60	4.80	0.04	28.92		
	2nd cross road	Cum	1	153.30	4.90	0.04	30.05		
	1st cross road	Cum	1	150.80	5.00	0.04	30.16		
	5th cross (DV Gundappa road)	Cum	1	150.10	5.00	0.04	30.02		
	SIR M.V LAYOUT								
	2nd main 6'A cross road	Cum	1	111.65	4.10	0.04	18.31		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	DESHBANDHU NAGAR								
	Shiva temple Road	Cum	1	29.90	5.20	0.04	0.62		
	2nd Cross	Cum	1	56.20	5.70	0.04	1.28		
	7th Main	Cum	1	215.90	5.30	0.04	4.58		
	CHIKKA VENKATAPPA LAYOUT								
	1st Cross Road	Cum	1	100.30	5.00	0.04	2.01		
	2nd Cross Road	Cum	1	99.00	5.10	0.04	2.02		
	3rd Cross Road	Cum	1	81.50	4.80	0.04	1.56		
	Chikka venkatappa Main Road	Cum	1	123.60	4.10	0.04	2.03		
		Cum	1	114.50	4.50	0.04	2.06		
	3rd Cross Road	Cum	1	46.30	3.80	0.04	7.04		

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RAMASWAMAPPA LAYOUT									
2nd Cross	Cum	1	53.80	3.50	0.04	0.75		
1st Main Road kattaramma temple junction	Cum	1	140.20	3.50	0.04	1.96		
3rd Cross Road	Cum	1	46.30	3.80	0.04	0.70		
TELECOM LAYOUT								
3rd cross road	Cum	1	150.60	4.80	0.04	2.89		
2nd cross road	Cum	1	153.30	4.90	0.04	3.00		
1st cross road	Cum	1	150.80	5.00	0.04	3.02		
5th cross (DV Gundappa road)	Cum	1	150.10	5.00	0.04	3.00		
SIR M.V LAYOUT								
2nd main 6'A cross road	Cum	1	111.65	4.10	0.04	1.83		
Basic rate							7659.00	
Area weightage 6%							459.54	
Total						**373.60**	**8118.54**	**3033083.46**
16 Providing Plastic to Bituminous concrete @ 8%								
8% OF BC	Kg		0.08	373.60	117.00	**3496.89**		
Basic rate							27.00	
Area weightage 6%							1.62	
Total						**3496.89**	**28.62**	**100081.06**
17 KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
DESHBANDHU NAGAR								
Shiva temple Road	Sqm	2	29.90	0.10		5.98		
2nd Cross	Sqm	2	56.20	0.10		11.24		
7th Main	Sqm	2	215.90	0.10		43.18		
CHIKKA VENKATAPPA LAYOUT								
1st Cross Road	Sqm	2	100.30	0.10		20.06		
2nd Cross Road	Sqm	2	99.00	0.10		19.80		
3rd Cross Road	Sqm	2	81.50	0.10		16.30		
Chikka venkatappa Main Road	Sqm	2	123.60	0.10		24.72		
	Sqm	2	114.50	0.10		22.90		
RAMASWAMAPPA LAYOUT								
2nd Cross	Sqm	2	53.80	0.10		10.76		
1st Main Road kattaramma temple junction	Sqm	2	140.20	0.10		28.04		
3rd Cross Road	Sqm	2	46.30	0.10		9.26		
TELECOM LAYOUT								
3rd cross road	Sqm	2	150.60	0.10		30.12		
2nd cross road	Sqm	2	153.30	0.10		30.66		
1st cross road	Sqm	2	150.80	0.10		30.16		
5th cross (DV Gundappa road)	Sqm	2	150.10	0.10		30.02		
SIR M.V LAYOUT								

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2nd main 6'A cross road	Sqm	2	111.65	0.10		22.33		
Basic rate							512.00	
Area weightage 6%							30.72	
Total						355.53	542.72	192953.24
							Sub Total	4891034.45
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)							100000
							Miscellenious and rounding	8966
							TOTAL AMOUNT	5000000
							RUPEES FIFTY LAKHS ONLY	

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

AE

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

Executive Engineer
Byatarayanapura Division
Yalahanka Zone, B.B.M.P.
Bangalore-560092

Technical Sanction
Abstract Cost For Rs 50: 00 lakhs only
Head of Account P3158
CER NO: 53 Dt: 29/01/18

TA

DE (W&S)

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